

Zoar Nature Trail Guide

Welcome to Zoar State Forest Nature Trail system. Using this brochure, you can take a self-guided tour of the Mattaponi Bluffs and the Herring Creek trails. Markers have been placed along the trails in order to interpret what you see and to help you gain a deeper appreciation of the special qualities this area has to offer. Most of all pause to use your senses on your visit - sights, sounds, smells, and touch - all will give you an opportunity to learn more about this place. Please remember to leave only footprints, and take only photographs and memories with you, so that others may enjoy their visit. Help keep the forest a special place by kindly taking the litter you generate on your visit with you as you leave. Enjoy your visit and come again soon, for each visit will offer a different sensory experience in this changing place. Feel free to contact us at stateforest@dof.virginia.gov to let us know about your experience and offer suggestions to improve the trail.

Mattaponi Bluffs Nature Trail - (1 Mile)

Starting at the upper parking lot

Stop #1

You are now standing on an upland bluff. The vegetation is noticeably different from the plants and trees at lower elevations in front of you. While water is the major factor which determines this, sunlight and soil nutrients also play a part.

Stop #2

Fifty feet down the bluff lay the Mattaponi River floodplain. After long periods of heavy rain, much of the area is covered with water. The plants and animals that live there must be able to tolerate these periodic high water conditions.

Stop #3

Many of these bottomland trees have adapted to the fluctuating water table by developing wide spreading shallow root systems and buttressed tree trunks which help support the trees. Bottomland forests are forested wetlands that serve important functions as filters for rainwater runoff and help recharge shallow water aquifers.

Stop #4

Notice the large beech tree to your right. This tree has cavities in it. Look at the base on the back side. This is probably the result of the wet conditions which made this tree a host for a variety of insects and fungi. Trees with cavities provide needed nesting, foraging and winter cover for squirrels, raccoons, owls, wood ducks, woodpeckers and a variety of songbirds.

Stop #5

This seasonal freshwater pool is often called a vernal pool. Despite being dry at certain times of the year, when filled with water, it teems with life. The aquatic plants produce oxygen and slow flood waters. They trap sediment and remove nutrients and pollutants from the water. This is important habitat for a number of animals including frogs, toads and salamanders and many species of insect larvae mature here.

Stop #6

The Mattaponi River wanders from its headwaters in Spotsylvania County southeast to West Point where it meets the Pamunkey River to form the York River. Now principally used for recreation, the river remains a constant force in reshaping the landscape. Notice how soil cut from the outside of the river bend is redeposited further down river on the inner bend.

Stop #7

This stop features two large specimens of typical bottomland tree species. Behind you the green ash prefers direct sunlight and moist sites. It has a shallow root system and exhibits rapid growth. The swamp chestnut oak to your left also prefers these same growing conditions, but is a slower growing species.

Stop #8

When the ground is saturated with water and strong winds move along the river, some trees are not able to withstand these forces and break off or topple over. Others die of old age, disease, insect attacks or lightning strikes. When they die, insects and microorganisms begin the process of decomposition. This process breaks the tree into tiny pieces of organic matter. These nutrients are then used by other plants.

Stop #9

Two of the most dominant vines you will see in this area are poison ivy and greenbriar. Poison ivy is easily distinguishable by its clusters of three leaves and white berries when in season. Greenbriar is distinguished by green stems, heavy thorns, waxy leaves, and black colored berries. While both plants are a nuisance to us, whitetail deer make greenbriar a regular part of their diet, and songbirds feast on the berries of both plants in the fall and winter.

Stop #10

Notice the twin-trunked beech tree near the river. It had been gnawed extensively by beaver when it was younger causing the odd shaped trunk. These large wounds have since healed over. Beaver feed on the inner bark, leaves and twigs of more than forty woody plants. Active for about twelve hours each night, feeding and working on their dams, it is easy to see how the expression "busy as a beaver" originated.

Stop #11

You are now standing on an outer curve of the Mattaponi River. The water is undercutting this bank and the trees on it. Occasionally a tree ends up in the river. A certain amount of sediment and nutrient loading to the river and Chesapeake Bay is a natural phenomenon. However, excessive erosion and sedimentation caused by poor management of the land can have very detrimental effects on water quality in the Bay. This can adversely affect both fish and wildlife.

Stop #12

The bridge you just crossed was constructed by the Youth Conservation Corps. Local Boy Scouts, Americorp and other groups have also contributed to the development of Zoar State Forest. If you live nearby and would like to become a volunteer, please feel free to contact us at stateforest@dof.virginia.gov.

Stop #13

You are standing over the old river channel of the Mattaponi River which contains a wide assortment of ferns and wetland plants. These plants are perennials, which mean they grow back from their roots each spring after dying back to the ground each winter. One of these plants is the arrowhead plant, which grows a single purple flower stalk in midsummer and has arrowhead-shaped leaves. Another is jewelweed which has tiny orange flowers. It was called this peculiar name by early settlers due to the ability of its juices to help prevent the spread of poison ivy! Another interesting thing to see here is the “windthrow”. This is a term used to describe when trees are uprooted by high winds and thrown to the ground, often pulling up and displaying a large mass of roots in the process.

Stop #14

You have now returned to the top of the bluff. Here we see wild azalea, a small understory shrub. It has light green fuzzy leaves and small pink to white blossoms in late spring and early summer. Mountain laurel is also located here. It is a larger evergreen shrub with dark, shiny leaves. In the winter, this spot provides a good vista of the floodplain and river below you.

Stop #15

Notice that these trees are less hardy looking. This is due to the poorer soils present as well as past management practices. This area was selectively logged years ago. In the process, the larger dominant trees were removed, leaving smaller suppressed trees. Small openings were created in the canopy allowing just enough sunlight in to favor plants that grow well in shady conditions. One of these trees is the flowering dogwood, the state tree of Virginia.

NOTE: *You may now descend the steps to the lower parking area/canoe launch parking area. From there you can continue on to the Herring Creek Nature Trail or stop by the Herring Creek Canoe Access area. If you would prefer to stop your visit at this time, turn around and head back to the Upper Parking area.*

Herring Creek Nature Trail - (.4 Mile)

Starting at the lower parking lot

Stop #16

From this vantage point one can observe the meandering channel of Herring Creek below you and where it empties into the Mattaponi River 500 feet in front and to the right of you. The headwaters of this creek extend westward from this point approximately 18 miles. It received its name for the river herring which migrate to this area every spring, along with its close relative, the shad. These species of fish are described as being “*anadromous*”, meaning they spend most of their lives in the sea and migrate to fresh water to breed. They spawn annually in this lower stretch of the creek, and have generated fishing activity since colonial times.

Stop #17

From this spot you can observe several different understory plants. Each plant fills a special place, or niche, in the forest community. Here one finds mountain laurel, an evergreen shrub with thick shiny leaves which grow in clumps; wild blueberry, sometimes called huckleberry, which has oval shaped light green furry-textured leaves; and pawpaw with its distinctive large oval shaped dark green leaves.

Stop #18

In 1997 a large tree fell here and lay along the right hand side of the trail. Notice all that remains of this tree now which is undergoing the process of decomposition, returning its nutrients to the soil. This natural process is hastened by the work of insects, rainfall, and fungi which unlike other chlorophyll-producing plants prey on the energy stored in other plants. A variety of mushrooms and other fungi are visible at work. Remember to take care and not to collect these for food, as many are poisonous and quite toxic to humans.

NOTE: *150 feet ahead the trail descends a short distance to the right to the Herring Creek floodplain and creek bank. It is a dead-end. If you would prefer to bypass this portion of the trail, turn left and skip to stop #21 on the trail.*

Stop # 19

From this stop you will notice a rather unusual-shaped American beech with a forked trunk. This kind of trunk is likely the result of this tree having grown in an area which had been fairly open. Beech trees have very thin bark and often become easy prey for vandalism by people who don't know any better and want to carve their initials into the bark. Whenever the bark of a tree is inscribed or marked, the site becomes a possible infection site where various types of diseases can take hold and even cause a mortal infection.

Stop #20

At this stop the floodplain is entirely on the side of the creek where you are standing. The opposite steep bank forces rising water from the creek over to this bank. The creek has meandered as far as it can to the opposite bank, where marl, a hardened mud, found just below the topsoil has dramatically slowed the erosive effect of the water cutting the channel further. Several springs help drain the groundwater from the opposite hillside into the creek.

NOTE: *From this point return to the top of the bank and turn right to continue to the next stop.*

Stop #21

In front of you notice the large southern red oak with an unusual growth on the side of its trunk. This is called a “burl.” This feature was probably the result of an infestation or disease which afflicted the tree some years ago. It caused the grain of the tree to become deformed and has increased in size with years.

Stop #22

Just up the trail is a rather unusual looking white oak with a large hump on one side of its trunk. This was caused by some past damage to this tree which resulted in one of its twin trunks dying. The remaining trunk survived and the wound from the dead trunk healed over to form the hump you see today.

NOTE: *From here the trail returns to the Canoe parking area. You can ascend the stairs on the far side of the parking lot and walk along the upland ridge to the upper parking lot if you need. Thank you for visiting Zoar State Forest! Let us know about your experience or offer suggestions at stateforest@dof.virginia.gov*